

# IPv6 Readiness Report

ambilan.mypolycc.edu.my — ambilan.mypolycc.edu.my



Scan to verify

Category: Education • Generated: 04 Jul 2026, 22:30 MYT • Last Checked: 04 Jul 2026, 03:16 MYT • Verification ID: aca8f6d6-1261-422c-8881-31bd73a4483d

Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>

Audit trail: <https://ipv6.my6.my/audit/aca8f6d6-1261-422c-8881-31bd73a4483d>

<p><b>X</b></p> <p><b>Non-Compliant</b></p> <p>MGv6C-1.0</p>	<p><b>15%</b></p> <p><b>No IPv6 Support</b></p>	<p><b>IPv6-ONLY READINESS</b></p> <p>Website: <b>X Not Ready</b></p> <p>DNS: <b>X Not Ready</b></p> <p>Email: <b>X Not Ready</b></p>
--	---	--

IPv4 ADDRESSES
103.42.206.181

## Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	MAMPU_PDSA2
Country	MY
ASN	AS141201
ASN Name	JDN-AS-MY - Jabatan Digital Negara (JDN), MY
Network (CIDR)	103.42.206.240/29

Web Services (35%)				0 / 8
#	CHECK	RESULT	DETAIL	
1	AAAA Record	FAIL	No AAAA record found in DNS.	
2	Globally Routable IPv6	FAIL	IPv6 address is not globally routable.	
3	HTTP over IPv6	FAIL	HTTP is not accessible over IPv6.	
4	HTTPS over IPv6	FAIL	HTTPS is not accessible over IPv6.	
5	IPv6-Only Reachability	FAIL	Site is not reachable when limited to IPv6-only.	
6	TLS Certificate Valid (IPv6)	FAIL	TLS certificate is invalid, expired, or hostname mismatch over IPv6.	
7	Dual-Stack (IPv4 + IPv6)	FAIL	Domain is IPv6-only or IPv4-only.	
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.	

DNS & DNSSEC (25%)				0 / 5
#	CHECK	RESULT	DETAIL	
1	NS Has AAAA Record	FAIL	No nameserver has an AAAA record.	
2	NS Reachable via IPv6	FAIL	No nameserver is reachable over IPv6.	
3	NS Answers Queries via IPv6	FAIL	Nameserver does not answer queries over IPv6.	
4	DNSSEC Validated	FAIL	DNSSEC validation failed or zone is unsigned.	
5	Reverse DNS (PTR)	FAIL	No PTR record found.	
6	DS Record at Parent	FAIL	No DS record at parent.	
7	RRSIG Valid	FAIL	No valid RRSIG found.	

#	CHECK	RESULT	DETAIL
8	<b>Signing Algorithm</b>	<b>INFO</b>	No DNSKEY record found.

**Email Services** (25%) 0 / 6

#	CHECK	RESULT	DETAIL
1	<b>MX Record Exists</b>	<b>FAIL</b>	No MX record found in DNS.
2	<b>MX Server Has IPv6</b>	<b>FAIL</b>	MX server has no IPv6 address.
3	<b>SMTP Reachable via IPv6</b>	<b>FAIL</b>	SMTP is not reachable over IPv6.
4	<b>STARTTLS over IPv6</b>	<b>FAIL</b>	STARTTLS not available over IPv6.
5	<b>SPF Record</b>	<b>FAIL</b>	No SPF record found.
6	<b>DKIM Selector</b>	<b>INFO</b>	No common DKIM selector found.
7	<b>DMARC Record</b>	<b>FAIL</b>	No DMARC record found.

**IPv4 Baseline** (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	<b>A Record</b>	<b>PASS</b>	103.42.206.181
2	<b>HTTP over IPv4</b>	<b>PASS</b>	HTTP (port 80) responds over IPv4 — 52ms TTFB.
3	<b>HTTPS over IPv4</b>	<b>PASS</b>	HTTPS (port 443) responds over IPv4 — 38ms TTFB.

### Audit Trail & Evidence Record

Verification ID	aca8f6d6-1261-422c-8881-31bd73a4483d
Domain	ambilan.mypolycc.edu.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:16:31 MYT
Finished	04 Jul 2026, 03:16:39 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/aca8f6d6-1261-422c-8881-31bd73a4483d

### Integrity Verification

<span style="color: green;">✓ INTEGRITY VERIFIED</span>	
Algorithm	hmac-sha256-v1
Root Hash	5dd9345bbd2bb3e754e4e291234a2edb95732c9c852f8fd4f9f604c68c6e8314
http_headers	2464d95bb4a8cf1a47c7165b2ff3021a290e106421920b8c116f40cc061f6504
dns_responses	083b9741e60179cdf15b39ccff357bde5844eb12c890bfdfff5ce78135e2946
tls_handshake	8af5ed67e4ea2ca25443293c5c64df16d48fe00df71f973199332fe41fc30f2e
connectivity_log	e7e617dfb1409a5307e005aa22f07e16358171678b47ceff92171841e299c966
dns_resolution_times	7be4283c7a96da25fc353b756e963ee9432c5f47816b3600508ce07e1c197ab5

### Test Node Identity

Os	Linux srv1440888 6.8.0-124-generic #124-Ubuntu SMP PREEMPT_DYNAMIC Tue May 26 13:00:45 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.32
Server Ipv4	76.13.221.142
Server Ipv6	2a02:4780:5e:2789::1

### DNS Resolution Performance

Comparison of A (IPv4) vs AAAA (IPv6) query times across resolvers and transports. Shows median (p50) and 95th percentile (p95) of 3 samples per tuple.

Resolver	Transport	A p50 (ms)	A p95 (ms)	AAAA p50 (ms)	AAAA p95 (ms)	Delta (ms)
System	Default	29.82	30.82	18.29	20.15	-11.5
Google	IPv4	37.69	42.95	42.91	48.47	+5.2
Google	IPv6	48.18	57.5	41.59	49.8	-6.6
Cloudflare	IPv4	42.6	52.99	38.18	48.35	-4.4
Cloudflare	IPv6	66.28	80.45	46.24	64.17	-20



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7888
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ambilan.mypolycc.edu.my. 14394 IN A 103.42.206.181
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 58735
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 8529
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 63277
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 48078
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11854
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

### RRSIG

### DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 46435
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3594 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

**DNSSEC\_VALIDATION**

```
;; resolution failed: ncache nxrrset
; negative response, unsigned answer
; ambilan.mypolycc.edu.my. 3594 IN \-SOA; -NXRRSET
; mypolycc.edu.my. SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```



TLS Handshake Evidence

IPV4 Connection

IP Used	103.42.206.181
IP Version	4

```

depth=2 OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
verify return:1
depth=1 C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
verify return:1
depth=0 C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.my
verify return:1
CONNECTED(00000010)
---
Certificate chain
0 s:C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.my
i:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
a:PKKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
v:NotBefore: Apr 24 02:46:23 2026 GMT; NotAfter: Nov 9 02:46:23 2026 GMT
-----BEGIN CERTIFICATE-----
MIIFMTCCBLeGAWIBAgIMS52BcxpWPsZee6F7MAoGCCqGSM49BAMDMFAxCzAJBgNV
BAYTAKJFMFRkFwYDVoQkExBHBhG9iYXwTaWduIG52LXNhMSYwJAYDVQQDEEx1HbG9i
YXwTaWduIEVDQyBpVjBTU0wgQ0EgMjAxODAEfW0yNjA0MjQwMjMjNjNaFw0yNjEx
MDk0MjQwMjMjNjNaMIGMMQswCQYDVQQGEWJNTWESMBAGA1UECBMjUjVUUKFKQVlBMRRlW
EAYDVQHEwLQVVR5Q0pBwUExOTA3BGNVBAoTMEpBQkFUQU4gUUVORElESUx0BTB0
T0xJVEVLTkllIERBTiBLT0xFSiBLT0lVTKlUSTEaMBGGA1UEAwRKi5teXBvbHlj
Yy5lZHUubXkwdjAQBgcqhkJOPQIBBGUrgQQAIGNiAARvUuHMYKe+YQ5YztXibLQz
1Y3GAimwn8CHY0/kjin43jgBqN0ap28gpfN9LJKud/XNV6EYAEKS59FBtZvMoT
1aq0Phcw9bDIQIV5bhGCFXq4QwNE5vbt12vY7yN6HrKjggMbMIIDFzA0BgNVHQ8B
Af8EBAMCB4AwDAYDVR0TAQH/BAIwADCBjgYIKwYBBQUHAQEgYEWfzBEBggrBgEF
BQcwoAoY4aHR0cDovL3NLY3VyZS5nbG9iYXwzaWduLmNvb59jYWNlcnQvZ3NLY2Nv
dnNzbGhMhMjAxOC5jcncQwNwYIKwYBBQUHMAGGK2h0dHA6Ly9vY3NwLmLm5b2JhbHNP
Z24uY29tL2dzZWVjb3Zzc2xjYTIwMTgwVGVYDVR0gBE8wTTBBBgkrBgEEAAyAARQw
NDAYBggrBgEFBQCCARYmaHR0cHM6Ly93d3cuZ2Zvc2lubi5jb20vcmlvb3Np
dG9yS8wCAYG4EMAQICMCGA1UdEQMmCSCEsoubXlb2x52MuZWR1Lm15g9t9
eXBvbHljYy5lZHUubXkwdjAQBwUExOTA3BGNVBAoTMEpBQkFUQU4gUUVORElESUx0
BTB0T0xJVEVLTkllIERBTiBLT0xFSiBLT0lVTKlUSTEaMBGGA1UEAwRKi5teXBvbHlj
A1UdIwQYMBaAFFh7jnuq/mGAqpBAAa7W6AdGbj9IMB0GA1UdDgQMBBTHBkQU6Jg
bsHfxxMSIrdLEJufudCCAX4GcIsGAQ0B1nkCBAIEggFuBiIBagFoAHUayzj3FYl8
hkFEX1vB3fvjvKawc1HCmkFhbDLFMUW0cAAAGdvwGKJQAABAMARjBEAiAjgnR
8N08pw4XMi3pIjRsJay102UHxQU1jq+eup8DgIgem5MG23z3nwfqScvly26UTcv
HpzY/xRBW0nhRjJiY+wgAdwCvZ4g7V7B03Y+m2X72LqjrgQrHcWdWJF5V1gwv54WH
OgAA229yAuIAAAEAwBIMEYCIQRzPwmuZoTvTz75JbJAJr2ws7kw82HlPvblK
8WvLTAiH0eGAYNjfqdLhInLczYkDDBVSF+2U45GcsLkz0hv6DbBAHYAwJF+v0UZ
00ufzjespBB68fCIvoiv3/Vta12mtk0Us0AAAGdvwGltgAABAMARzBFaiBaZl1L
bit5eGRH/NuKchDRPhNkUhaj5NqbvheVEcxJ3AIhAMU0QdPxfg2D00U6JTrCT4aR
A20bbQ99PrAlixbbcojMaOGCCqGSM49BAMDA2gAMGUMCD5mj6REw6o/YePLOEjo
T0aUPK0QrnLEGFvnhZsb0R/Jx2h2hE1w0pA5BUUkxjdgIXAM0tujpUy8f5SH1f
r9yPkPLUtZ0XRn21Wj/d4A72LRT17DlleWPEojGtmUKzaEHL9A==
-----END CERTIFICATE-----
1 s:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
i:OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
a:PKKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
v:NotBefore: Nov 21 00:00:00 2018 GMT; NotAfter: Nov 21 00:00:00 2028 GMT
-----BEGIN CERTIFICATE-----
MIIDAJCCAomgAwIBAgINAe5fIpVCSQ5AZGo3DAKBggqhkJOPQDQzBQMS0wIgwYD
VQLExtHbG9iYXwTaWduIEVDQyB5b290IENBIC0gUjUxExzARBGNVBAoTckdsb2Jh
bFNpZ24xExARBGNVBAMTckdsb2JhbFNpZ24wHhcnMTgxmTIxMDAwMDAwWhcnMjg4
MTIxMDAwMDAwWjBQM0swCQYDVQQGEWJNTWESMBAGA1UECBMjUjVUUKFKQVlBMRRlW
di1zYTEEmCQGA1UEAxMdr2xvYmF5U2lubiBF00MgT1YgU1NMIENBIDwMTGwdjAQB
GcqhkJOPQIBBGUrgQQAIGNiAATDoRGNZSPHluG7q6bQA11Pte0ZD/xx44QlFam1
BM4eLeN+wfgwalsbkjzARCM9si/fnQeKNtKALgNmN0HTmV3VfGbcj6+22HVVZu
VeX/VeIGoWh1u7Lja/NDE7R5XaCjggEpMIIBJTA0BgNVHQ8BAf8EBAMCAyYwEgYD
VR0TAQH/BAgwBgEB/wIBADAdBgNVHQ4EFgQUWuOdSr+YYCqkEABrtboB0ZuP0gw
HwYDVR0jBBgwFoAUPeYpSjVqB8ohREom3m7e0oPQn1kwPgYIKwYBBQUHAQEEMjAw
MC4GCCqGAFBzABHijOdhRw0i8vb2NzcDIuZ2xvYmF5U2lubi5jb20vcmlvb3Np
dG9yS8wCAYG4EMAQICMCGA1UdEQMmCSCEsoubXlb2x52MuZWR1Lm15g9t9
dClYNS5jcmwRwYDVR0gBEAwPjA8BGRVHSAAMDQwMgYIKwYBBQUHAgEWMh0dHBz
018vd3d3Lm5b2JhbHNPZ24uY29tL2dzZWVjb3Zzc2xjYTIwMTgwVGVYDVR0gBE8w
MGQCMC41ZGQw5mpNZBmztq8huxKf9/trUJ3yL14q6YU+i2fjF2FRBNA64EBmlJ4
7dkS0wIwL9qYB0AphsLmV0LhknrzHZVvtqz7N0aIV18BEIDZQgK3gjxYzADjHSH
5uk4mCdW
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.my
issuer=C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
---
No client certificate CA names sent
Peer signing digest: SHA384

```

```
Peer signature type: ECDSA
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 2503 bytes and written 389 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_128_GCM_SHA256
Server public key is 384 bit
Secure Renegotiation IS NOT supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
Early data was not sent
Verify return code: 0 (ok)
---
DONE
```

## HTTP Response Evidence

### IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.42.206.181
Connect Time	24.1 ms
TTFB	64.57 ms
Total Time	65.33 ms

#### Response Headers:

```
{
  "0": "HTTP/1.1 302 Found",
  "1": "Cache-Control: no-cache",
  "2": "Content-length: 0",
  "3": "Location: https://ambilan.mypolycc.edu.my/",
  "5": "HTTP/1.1 200 OK",
  "6": "Content-Length: 1079",
  "7": "Content-Type: text/html",
  "8": "Last-Modified: Mon, 06 Apr 2026 06:26:35 GMT",
  "9": "Accept-Ranges: bytes",
  "10": "ETag: \"723168518ec5dc1:0\"",
  "11": "Server: Microsoft-IIS/10.0",
  "12": "X-Powered-By: ASP.NET",
  "13": "Date: Fri, 03 Jul 2026 19:14:49 GMT"
}
```

### IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.42.206.181
Connect Time	10.5 ms
TTFB	41.52 ms
Total Time	41.54 ms

#### Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Content-Length: 1079",
  "Content-Type: text/html",
  "Last-Modified: Mon, 06 Apr 2026 06:26:35 GMT",
  "Accept-Ranges: bytes",
  "ETag: \"723168518ec5dc1:0\"",
  "Server: Microsoft-IIS/10.0",
  "X-Powered-By: ASP.NET",
  "Date: Fri, 03 Jul 2026 19:14:49 GMT"
]
```

## Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.010777 0.021459
TCP Connect IPv4 → port 443	200 0.010173 0.061660

---

### Test Node Network Evidence

---

Node Profile	dual stack
--------------	------------

#### Egress Connectivity

IPv4 Egress	76.13.221.142
IPv6 Egress	2a02:4780:5e:2789::1

#### Sysctl IPv6 Flags

net.ipv6.conf.all.disable_ipv6	0
--------------------------------	---

#### IPv6 Routes

```
2a02:4780:5e::/48 dev eth0 proto kernel metric 256 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium
default via 2a02:4780:5e::1 dev eth0 proto static metric 1024 pref medium
```

#### IPv4 Routes

```
default via 76.13.221.254 dev eth0 proto static
10.6.101.0/24 dev wg0 scope link
10.6.102.0/24 dev wg0 scope link
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
172.29.0.0/24 dev wg0 scope link
```